

REMARKS

This Reply, filed in response to the Office Action mailed June 26, 2008, is believed to address all and every issue raised in the Action. A favorable reconsideration of the application is respectfully requested.

Claim Amendment and Status

Upon entry of the amendment, which is respectfully requested, claims 1-7 will be pending in the application. No new claims are added or no claims are deleted.

In the amendment, claims 1-7 are amended to improve wordings and to more clearly set forth the claimed subject matter. Support for amendment to claim 1 may be found by, for example, the disclosure at page 38, lines 19-23 of the specification. Other amendments to the claims are to bring the claims into a more standard format and contains no new matter. Entry of the amendment is respectfully requested.

Formal Matters

Applicants thank the Examiner for acknowledging the claim for foreign priority and the receipt of the certified copies of the priority documents.

Applicants further thank the Examiner for considering the references submitted in IDS and returning initialed copies of the SB 08 forms submitted June 16, 2005, June 7, 2007 and November 2, 2007.

Response to Rejection under 35 U.S.C. § 103

Claims 1-3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokouchi *et al*, US Patent No. 5,840,666 (hereinafter referred to as “US ‘666”).

US '666 reference is relied upon to disclose a grease composition, which is suitable for application to rolling bearings used in electrical parts and auxiliary engine equipment of automobiles, comprises; an aromatic ester base oil in an amount of 10% by weight or more of an ester oil based on the weight of the base oil in the composition, which can be considered 30% by mass or more based on the whole amount of the base oil), by citing the disclosure of US '666 at Col. 5, lines 63-65. The Office asserts that US '666 discloses that the aromatic ester oils include, trioctyl trimellitate, tridecyl trimellitate, and tetraoctyl pyromellitate. The Office further asserts that the grease composition further comprises, a diurea thickener compound such as the one claimed in claim 1, in an amount between 9 to 22 wt% (in an amount from 5 to 35 % by mass).

In the Office Action, claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over US '666 in view of Iso *et al.*, US Patent Application Publication No. 2002/0076125 (hereinafter referred to as US '125).

The Office admits that US '666 does not teach a grease composition comprising a carbon black or carbon nano tube as a conductive powder. The US '125 reference is relied upon to teach a grease composition, which is suitable for a rolling bearing and comprises a carbon black or carbon nano tube used as conductive powder within the composition. The Office asserts that it would have been obvious to one of ordinary skill in the art at the time of invention to modify US '666 with carbon black or a carbon nano tube conductive material in order to increase the conductive properties of the grease composition.

In the Office Action, claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over US '666 in view of Koizumi *et al.*, US Patent No. 6,251,841 (hereinafter referred to as US '841).

The Office admits that the final grease composition of US '666 does not include either of carboxylic acid or a carboxylate or amine based rust preventatives. The US '841 reference is relied upon to teach a grease composition having improved rust-proofing properties and comprising a lipophilic organic inhibitor such as carboxylic acid or carboxylate which acts as a rust preventative when used in combination with a hydrophilic organic inhibitor in an amount from 0.1 to 10 wt% respectively based on the total weight of the grease composition. The Office asserts that it would have been obvious to one of ordinary skill in the art at the time of invention to modify US '666 with rust preventatives to reduce the amount of wear to engine components.

Applicants respectfully traverse.

As all of the rejections are based primarily on the teachings of US '666, Applicants discuss US '666 with respect to all of the above rejections.

Applicants respectfully submit that the Office mischaracterize the teachings of US '666. The Office alleges that US '666 teaches that the disclosed grease composition comprises an aromatic ester base oil in an amount of 10% by weight or more of an ester oil based on the weight of the base oil in the composition (30 % by mass or more based on the whole amount of the base oil), citing the disclosure at col. 5, lines 63-65.

However, the cited portion of the US '666 reference states "It is preferable for obtaining an extended lubrication life to use *10% by weight* or more of *an ester oil (especially a polyol*

ester oil) based on the weight of the base oil. (Emphasis added.) Thus, the cited portion of the US '666 reference *fails to teach* that the composition comprises an *aromatic ester oil* in an amount of *30% or more based on the total weight of the base oil.*

Applicants note that US '666 states that the base oils include lubricant oils of mineral oils, synthetic oil, and natural oils, and the synthetic lubricant oils include aromatic oil, ester oils, ether oils. US '666 reference provides a long laundry list of mineral oils, synthetic lubricants, ester oils, ether oils, etc. It goes on stating that the base oils can be used either individually or as a mixture thereof. Col. 5, line 63 – col. 6, line 33. Applicants further note that US '666 discloses that the ester oils include aromatic esters, such as ... tiroctyl trimellitate, tridecyl trimellitate and tetraoctyl pyromellitate, Col. 6, lines 13-18.

However, Applicants submit that nowhere in the US '666 reference is a teaching or suggestion that the base oil in the disclosed grease composition comprises an *aromatic ester oil* in an amount of *30% by mass or more based on the total weight of the base oil.*

None of the remaining references, i.e., US '125 or US '841 cures the defects of the US '666 reference.

Thus, US '666, US '125 and US '841, alone or in combination, fails to teach each and every element of claim 1 and remaining claims, directly or indirectly, referring to claim 1.

Furthermore, as noted above, claim 1 has been amended to require that the base oil has a pour point of not higher than -30 °C, solely in order to advance the prosecution. Applicants respectfully submit that none of the cited references teach or suggest such limitation.

It is noted that the Office Action states that claims 1-3, 6 and 7 are rejected under 35 U.S.C. § 103(a) over US '666 reference, alone. Paragraph 3, pages 2-3. Applicants, however,

note that there is a possibility that the Office intends to rely upon US '666 reference alone to assert the claims 1-3, 6 and 7 are anticipated under 35 U.S.C. § 102(b). Applicants respectfully submit that, regardless of what legal basis is employed to reject claims 1-3, 6 and 7, the rejection is not sustainable because US '666 reference fails to teach each and every element of the currently presented claim 1, and the Office fails to establish *prima facie* obviousness rejection by failing to provide a rationale why one skilled in the art would modify the very general teachings of US '666 (i.e., a general broad description of base oil and ester oils; and the broader range of the amount of an aromatic ester oil) to reach the limitations of the invention defined in claim 1.

Furthermore, Applicants respectfully submit that the invention defined in amended claim 1 of the present application shows unexpected effects. Tables 1 and 2 of the specification of the present application shows results of experiments testing various properties of various grease compositions. The grease compositions of which the base oil comprises an aromatic ester oil and has a pour point not greater than -30 °C show “satisfactory” low level of “low-temperature abnormal noise,” while the compositions of which the base oil has a pour point of higher than -30 °C (e.g., Comparative Examples 2, 3 and 5) show “dissatisfactory” low level of “low-temperature abnormal noise.

As such, the rejection of claim 1 is not sustainable. For the same reasons, claims 2-7, which directly or indirectly refer to claim 1, also should be patentable.

Withdrawal of the rejections and favorable reconsideration of the application are respectfully requested.

CONCLUSION

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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